

PROCEEDINGS
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A NEW SPECIES OF *CINARA* FROM CALIFORNIA
SUGAR PINE (APHIDAE)

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The description of this species adds another *Cinara* to the list of species inhabiting our western pines.

Cinara saccharinipini n. sp.

Apterous viviparous female.

Size and general color.—Length from vertex to end of cauda varying from 3.37-3.90mm. All specimens have been over cleared, and no color notes from life were recorded. Color as represented from mounted specimens as follows: Head and thorax pale dusky, antennal segments III, IV and V pale with apical regions of segments dusky, most of VI dusky. Prothoracic femora pale at the base with the remainder pale yellowish. Prothoracic tibiae dark dusky at the base, this followed by dusky which increases to dark dusky at the apex. Metathoracic femora not as dark as the prothoracic femora and the pale region longer. Metathoracic tibiae much darker than the prothoracic tibiae, with the dark dusky area much longer. Tarsal segments dark dusky. Cornicles pale dusky, as cleared but little darker than abdomen. Cauda and anal plate dusky. Transverse pigmented spots pale.

Head and thorax.—Antennal segments with the following lengths: III .46-.48mm., IV .18-.20mm., V .26mm., VI .12 + .03mm. Sensoria distributed as follows: III 0-1 as a rule none, IV with only primary, V one secondary, plus primary. Primary sensorium on VI small, marginal sensoria few.

Hair on anterior margin of antennal segments more numerous and longer than on posterior margin. Hairs on anterior margin of third antennal segment not all of the same length, the longest which are the most numerous are about .09mm. in length, the shortest are about .03mm. long. All are set at an angle of about sixty degrees or more. The first and second antennal segments have numerous hairs. None of the antennal segments show imbrications. Rostrum extending to transverse pigmented spots. Last three segments of the rostrum with the following lengths: .215mm., .215mm., and .06mm. Eyes small, ocular tubercles well developed. Median transverse suture of head narrow, not much darker than rest of head. Hairs on vertex and dorsum of head fairly numerous, varying in length from .12-.15mm. not present on posterior margin. Mesosternal tubercle short, wide, rather rounded. Lengths of pro and metathoracic femora varying as follows: .93-1.05mm., 1.44-

1.50mm. Lengths of pro and metathoracic tibiae varying as follows: 1.35-1.50mm., 2.50-2.55mm. Hairs on femora numerous. Hairs on metathoracic tibiae numerous, set at an angle of about forty-five degrees fine. Hairs in mid region varying from .08-1.0mm. in length, of about the same length and texture on both outer and inner margins, but noticeably more numerous on inner margin near apex. First metatarsal segment with about 15-17 hairs on the ventral surface, this segment is about .14mm. in length. The second metatarsal segment is about .27mm. in length, on this segment the hairs on the ventral surface are more numerous than the hairs on the dorsal, the hairs on the two surfaces are of about the same length.

Abdomen.—Cornicles about .45mm. in width, with outer margin irregular, but not greatly so. Hairs on cornicles evenly distributed except for the rim where they are more numerous, finer and shorter than elsewhere, the longest about .10mm. in length. The hairs on the dorsum of the abdomen are numerous, about .12mm in length and rather coarse. The hairs on the ventral surface of the abdomen are more numerous than those on the dorsum, and slightly shorter and finer. The transverse pigmented spots are narrow and rather long, they have two irregular rows of long coarse hairs distributed rather evenly over the surface. The genital plate is small, rather narrow, and concave on the posterior surface, about eight hairs are located near the ends. Hairs on cauda confined largely to posterior margin. Median posterior portion of cauda bluntly pointed.

Alate viviparous female.

Length from vertex to end of cauda varying from 3.45-3.60mm. Color in life not recorded, cleared specimens similar to color of apterous viviparous female.

Head and thorax.—Antennal segments with the following lengths: III .48mm., IV .18-2.0mm., V .22-.25mm., VI .12 + .03mm. Secondary sensoria distributed as follows: III 4-6 as a rule five or more, IV 1-2 as a rule only one, V 0-2 as a rule one. On the third segment the sensoria are quite large covering more than half of side, arranged in a straight row, confined to apical half of segment, slightly tuberculate. Hair on antennal segments quite similar to hair on antennae of apterous viviparous female, except that there are no short hairs on the third segment, all hairs varying only slightly from .08mm. in length. No antennal segment imbricated. First and second antennal segments with numerous hairs. Hairs on dorsum of head fairly numerous, about .09mm. in length, posterior margin of head free from hairs. Lateral lobes of thorax with numerous hairs except for more lateral regions where the hairs are few or wanting. Median posterior lobe of thorax with numerous hairs. Costal margin of fore wing dark. Radial sector straight, radial cell long and narrow. Media once branched, the branch far removed from margin of wing. Surface of wings covered with long black scale-like structures.

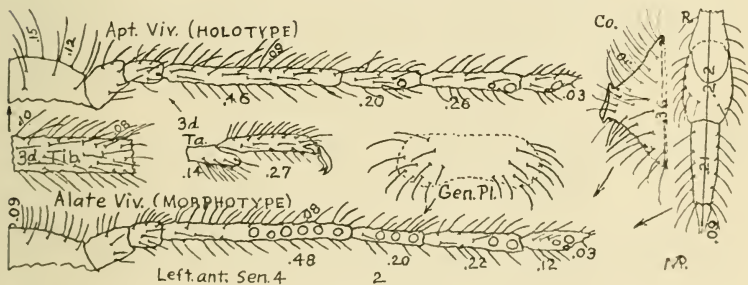
Rostrum almost reaching mid region of anal plate. Lengths of pro and metathoracic femora 1.05 and 1.65mm. Lengths of pro and metathoracic tibiae 1.44 and 2.77mm. Metathoracic tarsal segments .14 and .27-.28mm.

Abdomen.—Cornicles slightly smaller than cornicles of apterous viviparous females, varying from .30-.36mm. Hairs on cornicles and hairs on dorsal and ventral surfaces similar to hairs on these surfaces of the apterous viviparous female. Genital plate small, narrow, concave on the ventral surface, with eight hairs near the ends.

This species differs from *C. moketa* H. by having a median mesosternal tubercle, longer fourth antennal segment, longer femora and tibiae. From *C. hirticula* H. this species differs by having shorter antennal segments, longer segments of the rostrum, longer hairs on the tibiae and less extensive cornicles, the mesosternal tubercle is also shorter.

Holotype, apterous viviparous female, morphotype alate viviparous female, both mounted on the same slide which has been returned to the collection of Prof. E. O. Essig. Host, *Pinus lambertiana* (sugar pine) Upper Lake, California. Dec. 12, 1956 Coll. R. E. Ryekman.

In Palmer's key to the genus *Cinara* in, *Aphids Of The Rocky Mountain Region*, this species keys to couplet number 22. This couplet deals with the length of rostral segment four. None of the alternatives fit this species, but the one to *C. pseudoschwarzii* comes more nearly doing so. This species differs from *pseudoschwarzii* by having more hairs on the antennal segments, shorter hairs on the tibiae, less upstanding hairs on the tibiae, longer first metatarsal segment, and the legs and cornicles not black.



Cinara saccharimipini n. sp.